## ABSTRACT OF THE DISCLOSURE

Systems and methods for detecting an occlusion may include receiving a signal corresponding to a first force needed to deliver a first material through the tube. Furthermore, the systems and methods may include indicating that an occlusion exists if the first force is greater than a baseline value plus a delta value, the baseline value being assigned a value equal to the force necessary to deliver the first material through the tube in an un-occluded state and the delta value being assigned a value configured to create a desired level of sensitivity. Moreover, the systems and methods may include setting, if the first force is less than or equal to the first baseline value plus the delta value, and if a turbulence factor is less than a threshold value, the baseline value equal to a second force. The second force may be a low-pass filtered version of the first force and the turbulence factor may be a low-pass filtered version of the absolute value of the difference between the first force and the second force.